

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. 86-52

THRIFTY OIL COMPANY  
SERVICE STATION NO. 118  
SAN DIEGO COUNTY

1. Thrifty Oil Company owns retail service station number 118 at 4202 Clairemont Mesa Boulevard in San Diego. The site lies in the Tecolote Hydrographic Subunit and is approximately 1/2 mile from Tecolote Creek.
2. On December 17, 1985, Regional Board staff received notification by Thrifty Oil Company of a gasoline discharge at the subject service station.
3. On December 18, 1985 Regional Board staff visited the site and made the following findings:
  - a. Mr. Andy Fuchs, representative for Thrifty Oil Company, reported that at 1:30 a.m. December 17, 1985, a fuel truck arrived to deliver fuel to the service station. The fuel truck driver hooked up the delivery truck hose to a monitoring well thinking it was the fill pipe to the unleaded underground fuel storage tank. The truck driver injected 4200 gallons of unleaded gasoline into the monitoring well. The driver disconnected the hose and left the service station without realizing the mistake.
  - b. Later in the day, on December 17, 1985, a service station shift attendant discovered 47 inches of fuel product in the monitoring well.
  - c. A vacuum truck was immediately dispatched to the site and recovered 1975 gallons of gasoline.
  - d. The monitoring well is located in the pea gravel tank backfill area and is 159 inches deep. Thrifty Oil Company believes that most of the unrecovered gasoline is probably confined to this tank backfill area.
4. This office received a report of the unauthorized release from Thrifty Oil Company dated January 7, 1986. Thrifty Oil Company intends to employ a vapor extraction system to recover the fuel product from the tank backfill area. No borings have been installed to determine the depth to the water table.

5. The *Comprehensive Water Quality Control Plan Report, San Diego Basin (9)* (Basin Plan) was adopted by this Regional Board on March 17, 1975; approved by the State Water Resources Control Board on March 20, 1975; and updated by the Regional Board on February 27, 1978; March 23, 1981; January 24 and October 3, 1983; and August 27, 1984. The 1978, 1981, 1983 and 1984 updates were subsequently approved by the State Board.
6. Section 13050(1) of the California Water Code defines "pollution" as follows:

"Pollution means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects (1) such waters for beneficial uses, or (2) facilities which serve such beneficial uses."
7. The Basin Plan established no beneficial uses for the ground waters in the Tecolote Hydrographic Subunit.
8. The Basin Plan established the following uses as the beneficial uses for the surface waters in the Tecolote Hydrographic Subunit:
  - a. Non-contact Water Recreation
  - b. Wildlife Habitat
  - c. Preservation of Rare and Endangered Species
9. Although the Basin Plan does not recognize any existing or potential beneficial uses for the ground water underlying the Thrifty Service Station, the ground water quality is subject to the provisions of the State Water Resources Control Board's Resolution 68-16, *Statement of Policy With Respect to Maintaining High Quality Waters in California* (hereinafter referred to as the Nondegradation Policy). Under the terms and conditions of the Nondegradation Policy, the existing (pre-discharge) ground water quality of the Tecolote Hydrographic Subunit must be maintained unless it is demonstrated that a decrease in water quality (a) will be consistent with maximum benefit to the people of the state, (b) will not unreasonably affect beneficial uses, and (c) will not result in water quality less than prescribed in the Basin Plan or other adopted policies.
10. To protect the beneficial uses listed in Finding 8, it is required that discharges to Tecolote Creek not contain constituents exceeding the following concentrations:

<u>Constituent</u>	<u>Maximum Allowable Concentration</u>
Benzene	5.3 mg/l
Toluene	17.5 mg/l
Ethylbenzene	32.0 mg/l
Total Phenols	2.56 mg/l
Total Petroleum Hydrocarbons	15.0 mg/l

11. Thrifty Oil Company threatens to cause conditions of pollution, as defined in Finding 6 in waters of the state in accordance with the following rationale:

- a. Gasoline, injected into the tank backfill through the monitoring well, has created a petroleum hydrocarbon soil contamination zone at the Thrifty service station No. 118.
  - b. The gasoline contaminated backfill and soil threatens to be a source of contamination, by infiltration and leaching, to the underlying ground water. The petroleum hydrocarbon ground water contamination plume thus created could likely contain constituents exceeding the levels listed in Finding 10.
  - c. In the absence of effective remedial action by Thrifty Oil Company, the contamination plume could migrate to Tecolote Creek, thus the subsurface petroleum hydrocarbon contamination zone threatens to alter the water quality of Tecolote Creek to a degree which would affect the surface water beneficial uses listed in Finding 8.
12. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Administrative Code.

*IT IS HEREBY ORDERED*, That pursuant to Section 13304 of the California Administrative Code:

1. Thrifty Oil Company shall submit a report to this office no later than May 30, 1986 identifying and developing a range of remedial action alternatives to clean up the petroleum hydrocarbon contamination resulting from the injection of gasoline into the tank backfill at the Thrifty Oil service station No. 118. The report shall examine and determine the cost of cleanup alternatives capable of achieving each of the following final soil cleanup levels:
  - a. Treatment and/or removal of the contaminated soil to attain the naturally occurring background concentration of total petroleum hydrocarbons in the affected soil contamination zone. This cleanup alternative basically represents complete cleanup of the soil contamination zone resulting from the injection of gasoline into the ground.
  - b. Treatment and/or removal of the contaminated soil to attain levels that do not exceed 100 mg/kg total petroleum hydrocarbons in the affected soil contamination zone.
  - c. Treatment and/or removal of the contaminated soil to attain levels that do not exceed 1000 mg/kg total petroleum hydrocarbons in affected soil contamination zone.
  - d. A remedial action alternative proposing the attainment of petroleum hydrocarbon concentrations in the affected soil contamination zone that may be less stringent than the levels in a, b and c. Under this alternative it must be conclusively demonstrated that the proposed levels of petroleum hydrocarbons in the soil will not result in a discharge to the underlying ground water containing constituents in concentrations exceeding the following levels:

<u>Constituent</u>	<u>Maximum Allowable Concentration</u>
Benzene	5.3 mg/l
Toluene	17.5 mg/l
Ethylbenzene	32.0 mg/l
Total Phenols	2.56 mg/l
Total Petroleum Hydrocarbons	15.0 mg/l

2. All variables associated with Alternatives (c) and (d) (e.g., depth to ground water, leaching of petroleum hydrocarbons from soil, etc.) must be fully identified and evaluated to a high level of confidence. It will also be necessary to establish, to the satisfaction of the Regional Board, that the petroleum hydrocarbon concentrations proposed under alternatives (c) or (d) would comply with the following criteria in accordance with the state's Nondegradation Policy:
  - a. The proposed petroleum hydrocarbon concentrations to be attained in the affected soil contamination zone would not result in discharges to the underlying ground water or to Tecolote Creek that would unreasonably affect the beneficial uses of these water bodies.
  - b. The proposed petroleum hydrocarbon concentrations to be attained in the affected soil contamination zone will be consistent with the maximum benefit to the people of the state.
  - c. The proposed petroleum hydrocarbon concentrations to be attained in the affected soil contamination zone will not result in water quality less than prescribed in the Basin Plan or other adopted policies.
3. The cleanup alternatives required under Directive 1 of this Order will be evaluated in detail by Regional Board staff. This evaluation will include technical considerations, estimated costs, and anticipated water quality impacts associated with each alternative. Based on this evaluation a specific cleanup alternative will be selected by Regional Board staff for implementation. Upon notification by the Executive Officer, Thrifty Oil Company shall implement the cleanup alternative selected by Regional Board staff. If, however, Thrifty Oil Company wishes to implement cleanup alternative 1(a), the Company will not be required to develop cleanup strategies corresponding to alternatives 1(b), 1(c) and 1(d). If Thrifty Oil Company wishes to implement cleanup alternative 1(b), the company will not be required to develop a cleanup strategy corresponding to alternative 1(c) and 1(d). If Thrifty Oil Company wishes to implement cleanup alternative 1(c), then the Company will not be required to develop a cleanup strategy corresponding to alternative 1(d).
4. Thrifty Oil Company shall dispose of petroleum hydrocarbon contaminated ground water and/or soil in accordance with all applicable local, state and federal regulations.
5. Thrifty Oil Company shall take whatever appropriate actions as may be necessary to monitor the underlying ground water for petroleum hydrocarbon contamination for the duration of the cleanup program. For instance, monitoring wells would serve this purpose.

6. Thrifty Oil Company shall remove all subsurface free fuel product underlying the site.
7. Thrifty Oil Company shall submit quarterly progress reports discussing the cleanup program status and the progress made towards attaining the final cleanup criteria. Regional Board staff will determine the specific information to be included in the quarterly progress reports after staff's selection of the final cleanup alternative to be implemented at the Thrifty Service Station No. 118.

*Ladin H. Delaney*

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LADIN H. DELANEY  
Executive Officer

Date: April 28, 1986